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PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-112356

(43)Date of publication of application : 21.04.2000

(51)Int.Cl.

G09F 3/02

(21)Application number : 10-286303

(71)Applicant : OMRON CORP

(22)Date of filing : 08.10.1998

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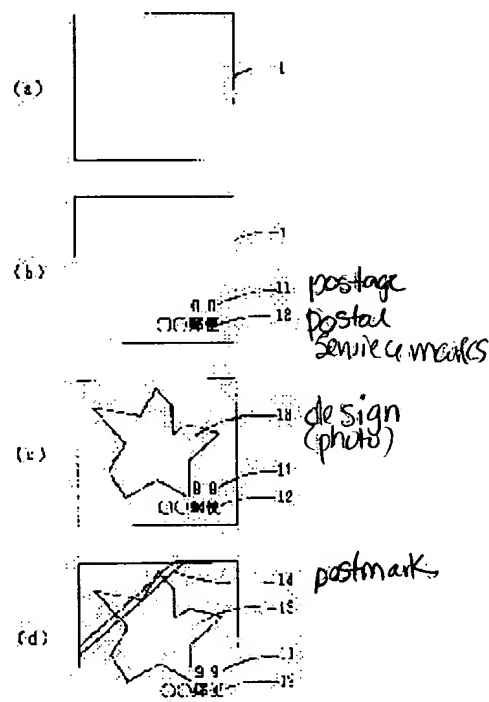
DOI HITOSHI

(54) SECURITIES, STAMPS, AND STAMP VENDER

(57)Abstract:

PROBLEM TO BE SOLVED: To make it possible to execute a beautiful photographic printing of originals and to exhibit sufficient functions as stamps.

SOLUTION: An image receiving sheet 1 which is a stamp mount is formed by forming a dyeing material layer having dyeing property, flatness and postmark erasing penetratability on the front surface of stamp base material paper 3 which has concealability and cushion property and on which a glue surface 2 is to be formed on the rear surface, printing the front surface of the image receiving sheet 1 with postage 11 and postal service marks 12 and providing the front surface with a design region 13 to be printed with a photograph. The postmark 14 is stamped as well at the time of use as a stamp.



LEGAL STATUS

[Date of request for examination] 13.12.2001

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

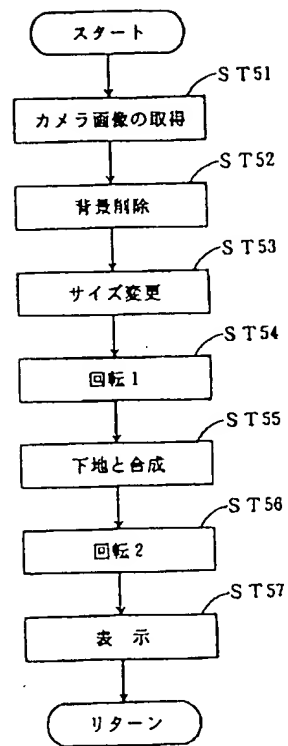
[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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【図11】



フロントページの続き

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===== WPI =====

- TI - Stamp for automatic stamp vending machine has paste surface formed at back of stamp base while charge amount and postal administration mark are printed on surface of image-receiving sheet
- AB - JP2000112356 NOVELTY - A flat dyeing sheet layer (4), formed on the surface of a stamp base (3), has a dyeing property, concealing property, cushion property and a postmark permeability characteristic. A paste surface (2) is formed at the back of a stamp base. A charge amount and a postal administration mark are printed on the surface of an image-receiving sheet. A photograph is printed on a drawing area.
- DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the automatic stamp vending machine.
 - USE - For automatic stamp vending machine
 - ADVANTAGE - Offers stamp with user photo by printing user photograph on a drawing area. Offers durable stamp due to color omission and color change prevention characteristic of stamp layers. Prevents markings on photograph during postmarking due to divided area for photograph and area for postmarking.
 - DESCRIPTION OF DRAWING(S) - The figure shows the cross sectional view of the stamp.
 - Paste surface 2
 - Stamp base 3
 - Dyeing sheet layer 4
 - (Dwg.2/11)
- PN - JP2000112356 A 20000421 DW200031 G09F3/02 007pp
- PR - JP19980286303 19981008
- PA - (OMRO) OMRON KK
- MC - T05-C05 T05-H04
- DC - P85 T05
- IC - G09F3/02
- AN - 2000-354404 [31]

===== PAJ =====

- TI - SECURITIES, STAMPS, AND STAMP VENDER
- AB - PROBLEM TO BE SOLVED: To make it possible to execute a beautiful photographic printing of originals and to exhibit sufficient functions as stamps.
- SOLUTION: An image receiving sheet 1 which is a stamp mount is formed by forming a dyeing material layer having dyeing property, flatness and postmark erasing penetratability on the front surface of stamp base material paper 3 which has concealability and cushion property and on which a glue surface 2 is to be formed on the rear surface, printing the front surface of the image receiving sheet 1 with postage 11 and postal service marks 12 and providing the front surface with a design region 13 to be printed with a photograph. The postmark 14 is stamped as well at the time of use as a stamp.
- PN - JP2000112356 A 20000421
- PD - 2000-04-21
- ABD - 20000929
- ABV - 200007
- AP - JP19980286303 19981008
- PA - OMRON CORP
- IN - YOSHIDA MASATO; MAEDA TADASHI; TASAKA YOSHIRO; DOI HITOSHI
- I - G09F3/02

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] This invention relates to the valuable paper leaf ticket and stamp vending machines which printed an user's (user) photograph, such as a stamp and a gift certificate.

[0002]

[Description of the Prior Art] Finishing [the conventional stamp / a printing of the pattern or the amount of a charge as which the Ministry of Posts and Telecommunications specification was determined beforehand] so that it may generally be known well. On the other hand, a photograph of an user's face fraction and the whole body is taken, and the photograph seal vending machine (Print Club:tradename) outputted as seal paper combining the background and parts which have been prepared beforehand has spread.

[0003]

[Problem(s) to be Solved by the Invention] In recent years, a development of "the stamp with a photograph" which combined the above-mentioned photograph seal and the stamp is being demanded. When which "stamp" is desirable or considers from the user of a photograph seal, originality, such as beautiful quality of image and a unique background, is desired, and if it considers from the Ministry of Posts and Telecommunications, counterfeit prevention is desired from the viewpoint of that a postmark is pushed exactly and a security.

[0004] However, in the conventional stamp, a pattern is printed by the whole stamp and there are that the amount of a charge and a postal administration mark are in a pattern and a problem that a front face is not smooth in the quality of the material, and the beautiful photoprint of user original is not made. Moreover, when the conventional photograph seal ground is used for a stamp, there is a problem will crawl a postmark etc. This invention is made paying attention to the above-mentioned trouble, and the original beautiful photoprint is possible and it aims at offering a stamp and the valuable paper leaf ticket which can fully achieve the function as a gift certificate.

[0005]

[Means for Solving the Problem] The valuable paper leaf ticket of this invention has the property of the dyeing property with a sublimation color, smoothness, cushioning properties, and concealment nature on pasteboard. While the amount of a charge and a postal administration mark may be printed with this valuable paper leaf ticket, for example, a stamp, the beautiful photograph print of user original is possible.

[0006] Moreover, the stamp of this invention has the property of the dyeing property with a sublimation color, smoothness, cushioning properties, concealment nature, and postmark permeability on pasteboard. In this stamp, the original beautiful photograph print is possible, and a postmark can also be pushed exactly. Moreover, the stamp of this invention consists of a prime area which prints the amount of a charge, a postal administration mark, etc., and a pattern field which impresses a photograph, a background, etc., the aforementioned prime area has postmark permeability, and the aforementioned pattern field has the waterproof property which seldom spreads beautifully.

[0007] In this stamp, a postmark can be exactly pushed on a prime area and the print of the original beautiful photograph can be carried out to it to a pattern field. Moreover, a pattern field is a blank paper, and the stamp vending machine of this invention equips only the prime area with the stamp pasteboard which printed the required matter, takes a photograph of a user's face fraction and the whole body, and is made to output a pattern to the aforementioned stamp pasteboard combining the background and parts which have been prepared beforehand.

[0008]

[Embodiments of the Invention] Hereafter, the gestalt of operation explains this invention still in detail. Drawing 1 is drawing showing the image of the stamp with a 1 operation gestalt photograph of this invention. By the ability carrying out the print of the photograph of an user's face, the whole body, etc., and the unique background by beautiful quality of image originally, this stamp with a photograph of postmark permeability is also good, and it is constituted so that a postmark may be pushed exactly.

[0009] (a) of drawing 1 shows the television sheet (pasteboard) of a blank paper. This television sheet 1 forms the dyeing material layer 4 in the top of the stamp base material 3 in which **** 2 was formed at the rear face [refer to (a) of view 2]. Since the function for which a television sheet is asked fixes the color of which ** sublimation was done in order to obtain clear quality of image, the dyeing property with a sublimation color is required for it.

[0010] ** Smoothness is required in order to make an ink donor sheet and an authenticity contact.

** In order to hide a substratum, white concealment nature is required.

** Cushioning properties are required in order to make an ink donor sheet and an authenticity contact.

** If an elasticity poly chlorination vinyl sheet and a plastics rubber are touched, a color change and a color omission will occur or an acetone and a lower alcohol will be touched, there is a problem on which a picture image disappears and the cure is required.

[0011] the dyeing property among the properties which more than needs, postmark permeability, and smoothness -- it is the dyeing material layer 4 that it is hard to carry out a color change, and concealment nature and cushioning properties are realized by the stamp base material 3. Concealment nature has been obtained by using the stamp base material 3 as white paper, and cushioning properties have been obtained by quality of paper. The material which has dyeing property can be used by the resin shown below by the ability making it independence, two or more kinds mixture, or a copolymer.

[0012] - The thing: polyester resin which has ester combination, a polyacrylic ester resin, The thing: polyvinyl chloride which has a high combination of a thing: urea-resin and a polarity which has the thing: polyamide resin and the urea bond which has the thing: ***** resin and amide combination which has - urethane bonds, such as polycarbonate resin, a polyvinyl acetate resin, and a styrene acrylate resin. In order to give postmark permeability to a polyacrylonitrile resin, polystyrene resin, a poly-caprolactone resin, a cellulosic resin, and the above-mentioned dyeing property material. In the ink for postmarks, since the solvent is contained if the property is oily ink, if a dyeing property material is a noncrystal resin, its permeability of a postmark is good. Therefore, what is necessary is just to limit to a noncrystal resin in the above-mentioned dyeing material.

[0013] What is necessary is just to carry out optimum-dose mixture of the water-soluble matter with the dyeing property shown below at the above-mentioned dyeing material, if it is water color ink. Starch, celluloses, saponification polyvinyl alcohol, aceto acetylation polyvinyl alcohol, carboxyl denaturation polyvinyl alcohol, sulfonic-acid denaturation polyvinyl alcohol, nitril denaturation polyvinyl alcohol, olefin denaturation polyvinyl alcohol, amide denaturation polyvinyl alcohol, pyrrolidone denaturation polyvinyl alcohol, etc.

[0014] In order to form the dyeing material layer 4 on the stamp base material 3, first, a dyeing material is melted or emulsification distributed, is used as the organic solvent or water at an emulsion, and a solution is built. Next, in the case of a sheet imprint method, a gravure coating machine, a roll coater, a curtain rotor, a blade coating machine, etc. are used, it applies the above-mentioned solution to the whole surface or a partial target, and carries out a stoving to a mold release sheet. Then, after carrying out position doubling of the dyeing layer formed on the mold release sheet so that the stamp base material 3 may be touched, the stamp base material 3 is made to carry out imprint adhesion of the dyeing layer using a hotpress, hot curl, etc. Moreover, in the case of a sinking-in method, the above-mentioned solution of a dyeing agent is infiltrated into the stamp base material 3, and it carries out a stoving. Smoothness is secured for the stamp base material 3 containing the dyeing material using a hotpress, a hot roll, etc.

[0015] the television sheet 1 shown in (a) of drawing 1, and (a) of drawing 2 -- first -- beforehand -- the amount of a charge -- (99) 11 and the postal administration mark (OO mail) 12 are printed. The ink layer 5 of (b) of drawing 2 is equivalent to this. Furthermore, the print of a photograph 13 is made. This example is shown in (c) of drawing 1, and (c) of drawing 2. The layer 6 of (c) of drawing 2 is a color layer of this print. If used as a stamp, a postmark 14 will be pushed as shown in (d) of drawing 1. The layer 7 of (d) of drawing 2 is equivalent to the ink layer of this postmark 14.

[0016] Drawing 3 is drawing showing the image of other stamps with an operation gestalt photograph of this invention. This stamp with an operation gestalt photograph consists of a pictures field 21 for carrying out the print of a photograph, the background, etc., and a prime area 22 for printing the amount of a charge, a postal administration mark, etc. The pattern field 21 has the waterproof property which seldom spreads beautifully, and the prime area 22 has the property that a postmark etc. can be pushed exactly. In this operation gestalt stamp, a field is divided roughly into two, the pattern field 21 and the prime area 22, for a postmark not being stamped on the photograph fraction of the pattern field which carried out the print beautifully with much trouble.

[0017] The pattern field 21 needs the property of dyeing property, smoothness, concealment nature, cushioning properties and a color change, and color omission prevention like the television sheet of the above-mentioned drawing 1. But it is different from the case of drawing 1, and postmark permeability is not given so that beauty of a photograph may not be spoiled. The function for which it is asked as a prime area 22 should just have postmark permeability as a property that what is necessary is just the quality of the material of the conventional stamp.

[0018] As this operation gestalt stamp is shown in (a) of drawing 4, **** 2 is formed in the inferior surface of tongue of the stamp base material 3, and the dyeing material layer 4 which constitutes the pattern field 21, and layer 4a which constitutes a prime area 22 are formed in the top. the prime area 22 of the television sheet 20 shown in (a) of drawing 3 -- first -- the amount of a charge -- (99) 11, the postal administration mark (OO mail) 2, and the background 22 are printed. The ink layer 5 shown in (b) of drawing 4 is equivalent to this. Furthermore, as shown in (c) of drawing 3, the print of an original photograph and the original background 13 is carried out to the pattern field 21. The color layer 6 of (c) of drawing 4 is equivalent to this. The stamp with a photograph is completed in the phase of (c) of drawing 3, and (c) of drawing 4. If it is used by being stuck on an envelope as a stamp, a postmark 14 will be pushed as shown in (d) of drawing 3. In this case, a postmark is not carried out to the pattern field 21. The layer 7 of (d) of drawing 4 is equivalent to the ink layer of this postmark 14.

[0019] Furthermore, the same [with being shown in (c) of drawing 4] as a stamp of other operation gestalt, although the pattern field 21 and the prime area 22 are divided, respectively and are arranged to another field, they may form not only the pattern field 21 but the prime area 22 on the same dyeing material layer as the pattern field 21. Next, an example of the stamp vending

machine with a photograph is explained. The stamp vending machine explained here is a device which sells the stamp with a photograph shown in drawing 1 and the drawing 3, and (b) of drawing 2 and the phase of (b) of drawing 4, i.e., a pattern field, are blank papers. Only the prime area is equipped with the stamp pasteboard with which the required matter was printed, a photograph of an user's face fraction and the whole body is taken, a pattern is outputted to this stamp pasteboard combining the background and parts which have been prepared beforehand, and it is as a stamp with a photograph. It comes out and carries out.

[0020] This stamp vending machine with a photograph is equipped with a camera 31, the one-way mirror 32, the fluorescent lamp 33, the control panel 34, the supplemental lighting 35, CRT36, the stamp printer 37, the personal computer 38, and the line rocker switch 39 and the curtain 40 as shown in drawing 5. Moreover, although not illustrated, the coin mechanism also has. A camera 31 takes a photograph of an user's picture image, and sends a picture image to a personal computer 38. A camera 31 is made to penetrate an user's picture image, and a one-way mirror 32 makes a photograph of it take at the time of photography while an user is reflected and it makes the screen of CRT36 check by looking. A fluorescent lamp 33 and the supplemental lighting 35 are turned on at the time of photography, in order to acquire an user's picture image in the better status. A control panel 34 receives switch operation of an user, and sends switch irruption to a personal computer 38. CRT36 displays the video signal from a personal computer 38. Display elements are a guidance of the operation according to advance of a game, a camera picture image at the time of photography, etc. The stamp printer 37 prints the synthetic picture image sent from the personal computer 38 on stamp pasteboard. A line rocker switch 39 performs activation/end of a mainframe.

[0021] A personal computer 38 has functions, such as a lighting control of a detection of the injection number of sheets of coin, the sequence control of a game, a recognition of switch operation of an user, a fluorescent lamp, and a floodlight, acquisition of a camera picture image, synthesis of a picture image, and a picture image output to a printer. Drawing 6 is a block diagram showing the internal-circuitry configuration of this stamp vending machine with a photograph. In the personal computer 38, it has OS51, the main control section 32, IO boat control section 53, the IO board 54, the video-camera control section 55, the video capture control section 56, the image-processing section 57, the capture board 58, the SCSI board 59, and the graphic board 60.

[0022] But since the configuration of the above-mentioned stamp vending machine with a photograph is the same as that of the vending machine of a Print Club sheet and a portrait sheet except for a stamp printer, a detailed explanation is omitted. Next, an operation of this stamp vending machine with a photograph is explained with reference to the flow view shown in drawing 7 - view 11. The initial state which turned on the line rocker switch is in the coin input waiting state of drawing 7 (step ST1). In this coin input waiting state, it judges in ***** of coin, displaying a demonstration first, as shown in drawing 8 (ST22). (ST21) if there is an injection of coin -- the number of sheets of supplied coin -- displaying (ST23) -- it judges whether the predetermined number-of-sheets injection of the coin was carried out (ST24) If it is judgment NO, although the following coin injection will be stood by, if it is judgment YES, it will move to step ST2 and selection of a synthetic pattern, i.e., selection of a background, will be performed. And a screen is seen and a selection result is checked (ST3). If an user operates authentication O.K., it will move to the photography setup 1 (ST4).

[0023] In this photography setup 1, as shown in drawing 9, the picture image used as a setup of the number of times of photography, and (ST31) and a substratum is set up (ST32). After the photography setup 1 is completed, it moves to the photography setup 2 (ST5). In the photography setup 2, as shown in drawing 10, reading of a synthetic format is performed (ST41). Specifically, a size, angle of rotation, the color / monochrome specification, transparency, and an arrangement coordinate are read. After the photography setup 2 is completed, it moves to display processing of a camera picture image and a substratum picture image (ST6).

[0024] By the display-processing routine of a camera picture image and a substratum picture image, as shown in drawing 11, it changes in size by acquiring a camera picture image (ST51) and deleting the background (ST52) (ST53), rotation 1 is performed (ST54), and it compounds with a substratum (ST55). Then, rotation 2 is performed (ST56) and a synthetic picture image is displayed (ST57). A display of the synthetic picture image of a camera picture image and a substratum picture image judges whether O.K. button was pushed (ST7). If an user pushes O.K. button, it is judgment YES, and a count-down will be continuously carried out in predetermined time progress (ST8). If predetermined time passes after pushing O.K. button, a judgment of ST8 serves as YES, next it judges whether photography of the number of times set up was completed (ST9), and if a judgment result is NO, it will return to ST5. If a judgment of ST9 is YES, it will judge whether it is authentication of a photography result (ST10). When authentication by the user is not made, it returns to ST5. If authentication is made by ST10, printing of the stamp with a photograph of several setting minutes will be made, and it will be outputted from the stamp exudation opening (ST11).

[0025] In addition, in the above-mentioned operation gestalt stamp vending machine, although the amount of a charge and the stamp pasteboard which printed the Ministry of Posts and Telecommunications mark are already prepared for the stamp vending machine and the case where the print of the photograph etc. was carried out was explained, the stamp pasteboard of a blank paper is prepared beforehand, the amount of a charge and the Ministry of Posts and Telecommunications mark may be printed with a stamp vending machine, and the print of the photograph may be carried out. Moreover, with the above-mentioned operation gestalt, although the stamp with a photograph was explained, this invention is applicable to other valuable paper leaf tickets, such as a gift certificate.

[0026]

[Effect of the Invention] According to invention concerning the claim 1 of a claim, since it has dyeing property, smoothness, cushioning properties, and concealment nature on pasteboard, the beautiful photoprint of user original becomes possible at a valuable paper leaf ticket. Moreover, since it has [according to invention concerning a claim 2] a color change and color

omission tightness in addition to the property which invention of a claim 1 has, a valuable paper leaf ticket can be made to withstand long use more.

[0027] Moreover, according to invention concerning a claim 3, the claim 4, and the claim 5, the beautiful photoprint of user original is possible and the stamp which can moreover perform a postmark certainly can be offered. Without soiling the photograph of a pattern field etc., even if it pushes a postmark, since it divides and has the prime area which prints the amount of a charge etc., and the pattern field which carries out the print of the photograph etc. according to invention concerning a claim 6 and the claim 7, while after use has been beautiful, it can save.

[0028] Moreover, according to invention concerning a claim 8, each one of users can get easily the original beautiful stamp by which the photoprint was carried out. Moreover, since an user can do stamp sale with the popular high stamp vending machine with a photograph, the enhancement in stamp sales is expectable as Ministry of Posts and Telecommunications.

[Translation done.]

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is a plan explaining the outline of the stamp with a 1 operation gestalt photograph of this invention.

[Drawing 2] It is a cross section explaining the outline of the stamp with the said operation gestalt photograph.

[Drawing 3] It is a plan explaining the outline of other stamps with an operation gestalt photograph of this invention.

[Drawing 4] It is a cross section explaining the outline of the stamp with the said operation gestalt photograph.

[Drawing 5] It is drawing showing the outline hard configuration of the stamp vending machine with a photograph which sells the stamp with a photograph shown in drawing 1 , the drawing 2 , the drawing 3 , and the drawing 4 .

[Drawing 6] It is the block diagram showing the circuit arrangement containing the interior of a personal computer of the stamp vending machine with the said photograph.

[Drawing 7] It is the flow view showing the main routine for explaining an operation of the stamp vending machine with the said photograph.

[Drawing 8] It is the flow view showing the sub routine of the waiting for the coin input of this main routine flow view.

[Drawing 9] It is the flow view showing the sub routine of the photography setup 1 of this main routine flow view.

[Drawing 10] It is the flow view showing the sub routine of the photography setup 2 of this main routine flow view.

[Drawing 11] It is the flow view showing the sub routine of display processing of the camera picture image of this main routine flow view, and a substratum picture image.

[Description of Notations]

1 Television Sheet (Stamp Pasteboard)

2 ****

3 Stamp Base Material

4 Dyeing Material Layer

11 Amount of Charge

12 Postal Administration Mark

13 Photograph Print Section (Pattern Field)

14 Postmark

[Translation done.]